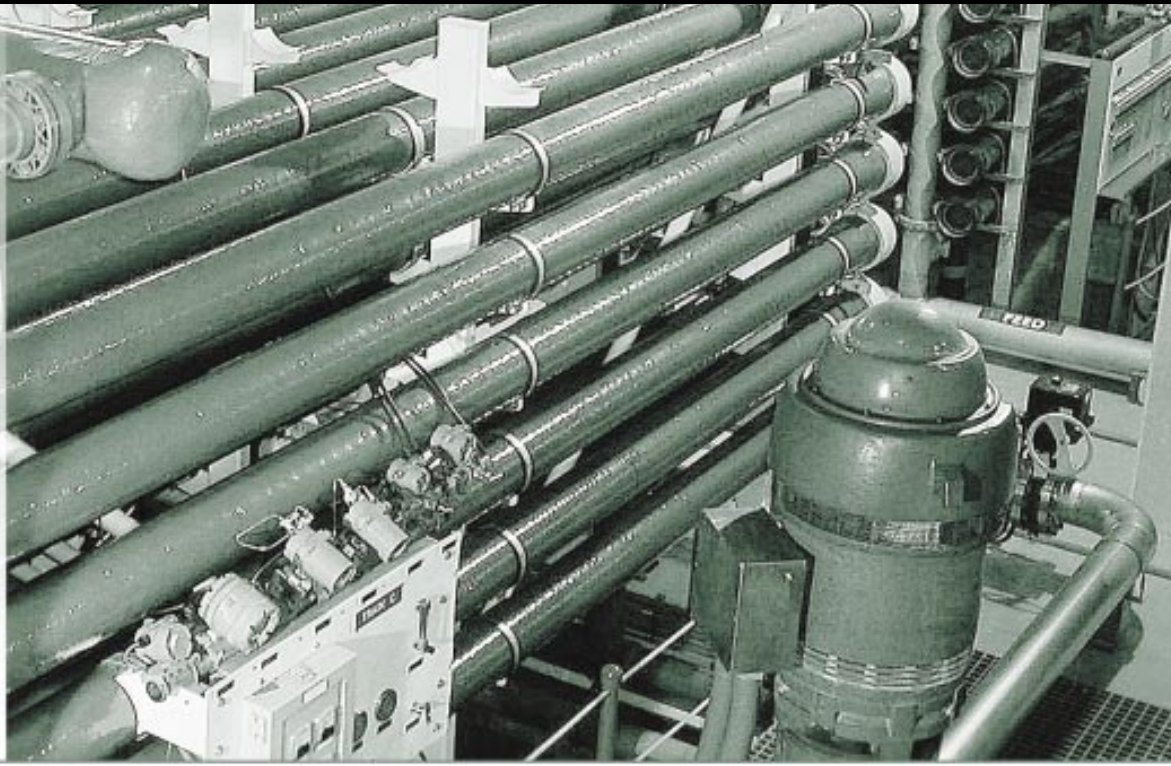


below
the
surface
an in-depth
look at...



Alternative Water Supply – GRANT PROGRAM

ON THE INSIDE

- Projects accomplish District goals
- Funding requirements
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- Project ranking criteria
- Funding timelines

As part of our mission to promote water conservation, the South Florida Water Management District offers grants to those entities willing to develop cost-effective, safe and appropriate alternative water supplies. Using alternative water resources can greatly offset the growing demand on our natural supplies of freshwater.

South Floridians work and play in a sunny, subtropical climate that continuously beckons more residents to the region. Unprecedented growth and development in recent years coupled with the protection and restoration of our natural resources, have presented water managers with bold challenges to provide water supplies for ever-increasing demands. The probability of multi-year droughts further magnifies the need to explore enhanced water supply options.

Our 16-county region encompassed by the South Florida Water Management District is totally dependent on rainfall for its fresh-water supply. While regional rainfall totals typically average 50-60 inches a year, the amount of rain greatly varies from one area of the region to another. Actual data spanning nearly a century show that total annual rainfall amounts have varied as much as 20 inches above or 20 inches below average figures. These extremes, sometimes evidenced by flood and drought, require great diligence when planning for future water supply for the entire region. Recent water supply plans have concluded that historically used freshwater sources will not be sufficient to meet all the future water needs of South Florida.



Large photo above: Reverse Osmosis Treatment
photo above: Aquifer Storage and Recovery
photo right: Reclaimed Water





The Florida legislature established the Alternative Water Supply Grant Program in 1995, s. 373.1961(2), F.S. The South Florida Water Management District has cooperatively funded a total of 97 projects since 1995 with \$22 million in tax revenues, making over 200 million gallons of water available.

An important step in water supply planning and implementation involves investigating and developing alternative water resources to offset increased use of fresh ground and surface water. In 1995, the Florida Legislature directed the state's five water management districts to share revenues from property tax assessments with public and private entities willing to develop suitable alternative water supplies. Accordingly, the South Florida Water Management District offers cooperative funding grants which fund up to 50% of the total cost of projects that help implement safe and cost-effective alternative water supply. Funded projects have included:

- **Use of Saline Water Sources –** Making brackish water from the Floridan Aquifer available for drinking water.
- **Aquifer Storage and Recovery –** Recovering water stored in the aquifer during the wet season.
- **Large-Scale Landscape Irrigation –** Making water available for large-scale uses such as golf course irrigation. Projects have included reclaimed water use, rainwater capture systems and reverse osmosis.

Public utilities, municipal, industrial and agricultural water users, and private users

such as major shopping malls and large homeowners' associations are invited to participate in grant opportunities. The program funds capital projects that use innovative methods to counterbalance increasing demands on our region's limited freshwater supplies. Examples of specific projects that have been successfully implemented in our 16-county region are shown in the table below.

AWS Projects Accomplish District Goals

Renaissance Project – In the City of West Palm Beach, the Renaissance Project accomplished several water management objectives. Flooding from ordinary rains often plagued residents in the 375-acre Pineapple Park neighborhood. Stormwater is now pumped away from the community and into a canal where it is treated and sent to a nearby retention basin. After settling, it is pumped into the municipal water treatment plant where it is made safe for drinking. Engineers predict the project will produce up to 300 million gallons of potable water a year.

Jupiter Island Holdings – Jupiter Island Holdings also initiated a project revered as a shining example in innovative water supply. Drinking water from the local water utility had previously been used for all water needs, including irrigation, in the Jupiter Island community. Now, rainwater captured in gutters and brackish water treated through reverse osmosis are stored in ponds and then used to irrigate a golf course, surrounding grounds and landscaped areas. The project accounts for a significant saving of freshwater that would have otherwise been drawn from our shallow aquifer's limited supply.

Funding Requirements

The South Florida Water Management District develops and implements alternative water supply Funding Program Guidelines each fiscal year. The following requirements will need to be met for a project to be considered.

- The project will provide an effective alternative water supply.

Entity	Project Name	Project Description
Quail Ridge Property Owners Association – Palm Beach County	Reclaimed Water System Expansion	Reclaimed water from the Boynton/Delray South Central Regional Wastewater Treatment & Disposal Board is used for irrigation of the entire development.
City of Cape Coral – Lee County	Gator Slough Reuse System Enhancements	Reclaimed water supplemented with surface water from local canals is used for irrigation of over 27,000 homes. The expanding project has been funded almost yearly.
Lee County	Fiesta Village Reuse	Fiesta Village wastewater treatment plant lacks users for all its reclaimed water while the adjacent Ft. Myers Beach facility has excess demand. Through an interconnect, Ft. Myers Beach is able to use excess reclaimed water from Fiesta Village.
City of West Palm Beach – Palm Beach County	Renaissance Project	Stormwater is captured, purified in a settling basin, then transferred to a surface water source. Benefits include alleviating flooding at a lower cost than constructing drainage improvements as well as water supply.
Jupiter Island Holdings, Inc. – Martin County	Irrigation Water Supply	Captured rainwater and treated brackish water are stored in containment ponds and used for landscape irrigation.

Alternative Water Supply Grant Project Examples

PROJECT RANKING CRITERIA

Criteria	Guidelines for Scoring
✓ Consistency with District Plans	Evaluate the extent to which the project complies with or furthers the recommendations of regional water supply plans and initiatives.
✓ Environmental Benefits	The project enhances isolated wetlands, helps protect environmentally sensitive areas, facilitates aquifer protection, or reduces saltwater intrusion.
✓ Reduces Dependence on Traditional Resources	Project replaces or reduces dependence on a traditional water source and/or reduces competition with other water users for the same source.
✓ Overall Cost Effectiveness	Evaluate how the project demonstrates cost effectiveness in facility design and construction, costs relative to additional water availability, and in costs to the end user.

- Funding will be used only for paying capital or infrastructure costs.
- Application for relevant permits will be made prior to project funding.
- Project completion will be within 36 months from the date of the signed cooperative agreement.

Getting Started

Applying for a grant is straightforward. If the proposed project meets the previously described requirements, the applicant should follow these steps:

- To request an application, phone 561-682-6391, fax 561-681-6275. For technical assistance or help completing the form, contact Jane Bucca at 561-682-6791, or e-mail jbucca@sfwmd.gov
- Submit the application on or before the deadline stated in the application. The closing date is generally the first week in April of each year.
- You will receive a letter from the District notifying you of eligibility and listing any concerns or questions staff may have about the project.

Selection Committee Review

Your application will be submitted to a Selection Committee for review and rank-

ing. The selection committee includes one or more representatives of county, municipal, and investor-owned private utilities and may include representatives of agricultural and environmental interests. Recommended rankings are generally completed by August and presented to the District's Governing Board. The Board decides which projects will be funded and the dollar amount of funding.

If project funding is approved, you will receive notification and be asked to sign an executable agreement with the District. Construction of the project must be completed, inspected and approved by the District before the grant funds are made available.

Project Ranking Criteria

The Alternative Water Supply selection committee ranks projects on specific guidelines and eligibility criteria. Project Ranking Criteria are precisely defined each fiscal year, however, the intent and purpose remains the same from year to year. The description given above is generic.

Grant Funding Timelines

The program funds grants on an annual basis and is managed through a process based on specific timelines as set forth below.

The City of West Palm Beach received grant money to implement an innovative project that

- 1) relieves neighborhood flooding,
- 2) enhances wetlands, and
- 3) provides for a new source of drinking water.



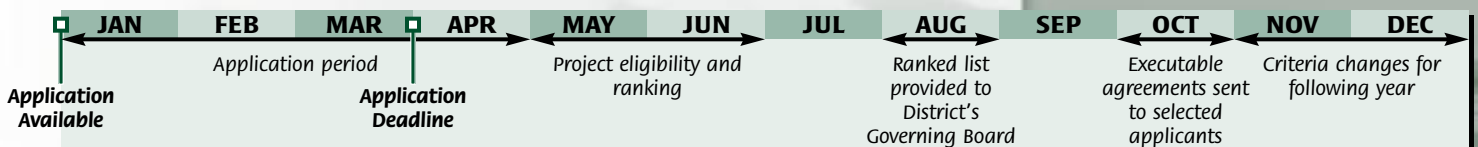
Excess rainwater is pumped from the Pineapple Park neighborhood



Stormwater settles in a retention basin



Water is ultimately made safe for drinking



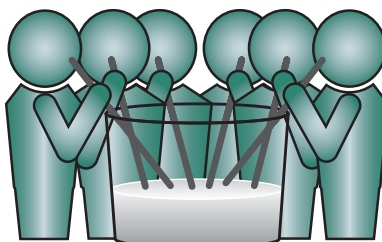
YEAR 2000 POPULATION

Projected



2 Million

Actual



6 Million

Developing alternative water supplies will increase the availability of freshwater for the environment and a growing population.

Once an application is received, the document is checked for eligibility, then forwarded to the Selection Committee.

Applicants are notified of dates for public hearings and encouraged to attend. The Selection Committee scores and ranks the projects which are then presented to the District's Governing Board as part of the budget process. When awards are finalized, the money is encumbered and project monitoring begins.

Water Supply Needs – Now and the Future

Development of alternative water supply sources is consistent with and complements regional water supply development projects and plans, such as the Comprehensive Everglades Restoration Plan. Use of alternative water supplies reduces the demand for water from regional sources, such as Lake Okeechobee and the Everglades, and allows for current and future

water demands to be met, especially in times of drought.

During the 1990s, 834 people moved to Florida every day, and water demand increased by nearly 150 thousand gallons a day. As population continues to grow, so must the development of alternative water supplies. Through the District's commitment to funding partnerships, over 190 million gallons of water have been saved or offset in the last four years. For a sustainable future, there is no better time than now to tap into the Alternative Water Supply Grant program.

– FOR ALTERNATIVE WATER SUPPLY GRANTS & INFORMATION –

Jane Bucca 561-682-6791 or
jbucca@sfwmd.gov

– FOR WATER REUSE INFORMATION –

Mark Elsner 561-682-6156 or
melsner@sfwmd.gov

The South Florida Water Management District is a regional, governmental agency that oversees the water resources in the southern half of the state. It is the oldest and largest of the state's five water management districts.

Our Mission is to manage and protect water resources of the region by balancing and improving water quality, flood control, natural systems, and water supply.

This "Below the Surface" publication on the Alternative Water Supply Grant Program directly supports our mission of water supply.



sfwmd.gov

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DID YOU KNOW?

- Within the state, 2.7 billion gallons of water are used for products or crops, consumed by humans or livestock, or otherwise removed from the environment daily.
- Water used for outdoor irrigation is estimated to be more than 50% of total household consumption.
- Reuse of reclaimed water and water conservation are major objectives within the state of Florida.
- In our 16-county district, there are 100 reuse systems delivering an average of 190 million gallons of reclaimed water a day.
- District users of reclaimed water include over 47,000 residences, 145 golf courses, 64 parks and 16 schools.
- Today, there are over 25 potable water suppliers in the SFWMD using a brackish water source and reverse osmosis treatment to meet their water supply demands.
- Currently, there are 5 operating aquifer storage and recovery wells in the SFWMD using treated drinking water and partially treated surface water. There are 15 ASR wells under operational testing and over 10 wells are under construction.

Florida's Water
It's Worth Saving